NOAA Weather Wire Service

The NOAA Weather Wire Service is considered the primary telecommunications network for disseminating weather information to the mass media, emergency management agencies, and other users. Every weather product issued by WFO Paducah is identified by a ten-character WMO (World Meteorological Organization) ID code (TTAA00 KPAH). Using a combination of dedicated phone lines and satellite communications, the product is placed on the NWWS in a matter of seconds from the time it leaves our office.

Traditionally, NWS products have carried two different identifiers. For example, a Tornado Warning issued by WFO Paducah carries a WMO ID code of WFUS53 KPAH and a NWS ID code of SDFTORPAH. This guide refers to products using the NWS ID code. A cross-reference table is provided in Appendix D to convert the NWS ID to the equivalent WMO ID and vice versa. The NWWS uses WMO ID's.

An upgrade to the NWWS occurred in the year 2000 when the Replacement NWWS became operational. At its full capacity, the new R-NWWS provides users with extensive graphics imagery in addition to text products. Coinciding with this upgrade, the NWS will eliminate the current two-code county identification system, which uses both Zone and FIPS codes. The new Universal Geographic Code (UGC) will be a single-code system based on the FIPS codes listed in Part I of this manual.

For more information on the NOAA Weather Wire Service, you may visit Dyncorp's web site at http://www.weatherwire.net. You can subscribe to the NWWS by calling Dyncorp at 1-800-633-2340.

Standard Product Format

Each product issued by the National Weather Service follows a standardized format. A brief description of this basic format follows on the next page using a tornado warning as an example.

MASS MEDIA HEADER:

TTAA00 KXXX DDHHMM
ZONE OR COUNTY CODES-DDHHMM-

This block identifies the originating weather office (KXXX), the day and time for which the product is valid (the first DDHHMM), the zone or county codes for which the product is valid (CODES), and the day and time that the product expires (the second DDHHMM). This enables computers to route information through proper channels. All times mentioned are in Coordinated Universal Time (UTC).

TITLE:

BULLETIN - EAS ACTIVATION REQUESTED
TORNADO WARNING
NATIONAL WEATHER SERVICE PADUCAH KY
935 AM CDT FRI OCT 3 2000

This gives the name of the product (e.g., Tornado Warning), the originating office, and the date and time the product was issued, in plain English.

BODY:

THE NATIONAL WEATHER SERVICE IN PADUCAH HAS ISSUED A

- **TORNADO WARNING FOR…**
  MCCRACKEN COUNTY IN WESTERN KENTUCKY
- **UNTIL 1015 AM CDT**
- **AT 934 AM CDT…NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A DEVELOPING TORNADO 10 MILES WEST OF PADUCAH NEAR KEVIL…MOVING EAST AT 30 MPH.**
- **SOME LOCATIONS AFFECTED…**
  PADUCAH BY 950 AM CDT

The main section of the product is the body. It provides the user with the what, where, when, and why for this particular weather product.

CALL-TO-ACTION STATEMENT:

IF YOU ARE CAUGHT OUTSIDE…SEEK SAFETY IN A NEARBY STURDY BUILDING. AS A LAST RESORT…SEEK REFUGE IN A CULVERT…DITCH OR LOW SPOT AND COVER YOUR HEAD WITH YOUR HANDS. BEWARE OF RISING WATER.

The call-to-action statement provides a few words to advise the user of safety precautions associated with this weather event.

NOAA Weather Radio

NOAA Weather Radio is a service of the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service. As the ***Voice of the National Weather Service***, it provides continuous broadcasts of the latest weather information. Digitally recorded weather messages are repeated every three to five minutes and are routinely revised at least every hour to cover changing weather conditions. NOAA Weather Radio serving the four-state region operates on a 24/7 basis, with the format tailored to the needs of the people within the listening area.

During severe weather, the National Weather Service preempts the routine weather broadcast and substitutes special warning messages. Critical information is broadcast live to get the information to the public as soon as possible. An emergency tone alarm is broadcast before the voice message, allowing specially equipped NOAA Weather Radios to audibly or visually alert the user. SAME-equipped weather radios are also capable of displaying a digital message detailing the weather advisory before the information is disseminated verbally over NOAA Weather Radio. SAME (Specific Area Message Encoding) and NOAA Weather Radio work in conjunction with the media and national, state, and local emergency agencies to comprise the Emergency Alert System (EAS).

At this time, an increasing number of NOAA Weather Radio vendors are marketing new radios with the capability of decoding the SAME messages. Owners of these radios can program the radio to alarm for *certain* weather hazards within *specific* counties. To obtain the SAME codes needed to program these radios, you can call 1-888-NWR-SAME or log onto the Internet at http://www.nws.noaa.gov/nwr.

Commercial radio and TV stations are authorized to rebroadcast any material, especially weather watches and warnings, transmitted over the weather radio, subject only to minimal restrictions stated in FCC Public Notice 70110852876.

The following table details the seven NOAA Weather Radio transmitters operated by the National Weather Service in Paducah. The broadcasts can be heard as far away as 40 miles from the antenna site, sometimes more. The effective range depends on many factors, particularly the transmitter height, terrain, receiver quality, and current weather. An outside antenna can be very effective in improving reception.

Service Area	***Transmitter Location***	***Broadcast Frequency***
Evansville Tri-State	Evansville, Indiana	162.550 MHz
Southeast Missouri (Bootheel Area)	Sikeston, Missouri	162.500 MHz
Southeast Missouri (Ozark Foothills)	Doniphan, Missouri	162.450 MHz
Southern Illinois	Goreville, Illinois	162.425 MHz
Western Kentucky (Pennyrile-north)	Madisonville, Kentucky	162.525 MHz
Western Kentucky (Pennyrile-south)	Hopkinsville, Kentucky	162.450 MHz
Western Kentucky (Purchase Area)	Mayfield, Kentucky	162.475 MHz

Weather Information Now

W.I.N.—Weather Information Now—is another outlet through which the public, media, or emergency managers may obtain weather data. On both the Paducah and Evansville W.I.N. systems, the weather information is digitally recorded onto specific message paths as soon as new data becomes available.

The products recorded on W.I.N. include:

- ✓ 48 Hour & Extended Forecast
- ✓ 6 – 10 Day Outlook
- ✓ Climate Information
- ✓ River & Lake Information
- ✓ Road Condition Phone Numbers

The user also has the option of speaking to a forecaster if more detailed information is required. Weather Information Now is accessible 24 hours a day, all year round. Just call (270) 744-6331 in the Paducah area or (812) 425-5549 in the Evansville area.

Information Superhighway *(http://www.crh.noaa.gov/pah)*

Whether it's tomorrow's forecast or last month's climate information, WFO Paducah's Internet page features a wealth of information that's sure to fulfill many of your weather-related needs. Included is information and pictures on historic weather events, a schedule of SKYWARN spotter training, details on NOAA Weather Radio, weather records and normals for your hometown, and a new science page featuring research and findings from our office. There are also links to the NOAA, NWS, and Central Region homepages.

Of particular interest is the array of current weather information—right at the tips of your fingers! This includes:

- ✓ ***Severe weather information*** (warnings, advisories, storm reports)
- ✓ ***Radar images and satellite pictures*** (including Doppler radar images)
- ✓ ***Hourly weather observations and forecasts*** (both short and long term)
- ✓ ***Hydrological observations and forecasts*** (including flood warnings)
- ✓ ***Climatological data*** (daily, monthly, and record information)
- ✓ ***Road condition reports*** (for interstates and other major routes)

The information is normally updated as soon as new products are issued. On occasion, however, problems beyond our control may preclude the timeliness of this information. As a general rule, always remember to check the date and time on a weather product to make sure you are not looking at old data!

Emergency Managers Weather Information Network

The Emergency Managers Weather Information Network (EMWIN) is a relatively new low-cost method for receiving National Weather Service weather products in both text and graphics format. Products available include severe weather and flood watches and warnings, forecasts, weather observations, satellite imagery, and a national radar summary. Users also have the capability of setting various alarms to alert them to a variety of information. These alarms can now be set to the county level.

EMWIN was designed to be a cost-effective alternative for emergency managers and others that lack access to, or funding for more costly data services. Because the weather information is free, the only cost is for the receiving equipment and inexpensive commercial software. This digital datastream is available nationwide directly from satellites, and in many locations, in an easier and less costly manner using local radio rebroadcasts and other techniques.

For more information on EMWIN, log onto the EMWIN information page at http://iwin.nws.noaa.gov/emwin/index.htm, or you may contact either WFO Paducah's Rick Shanklin at (270) 744-6440 (x726) or the EMWIN coordinator at National Weather Service Headquarters by dialing (301) 713-0326 (x191). A helpful list of EMWIN vendors that have many variations of systems, software, and options can be found at http://weather.gov under the EMWIN link.

The EMWIN datastream is also available on the Internet via the Interactive Weather Information Network (IWIN). To use IWIN, simply visit http://iwin.nws.noaa.gov.